

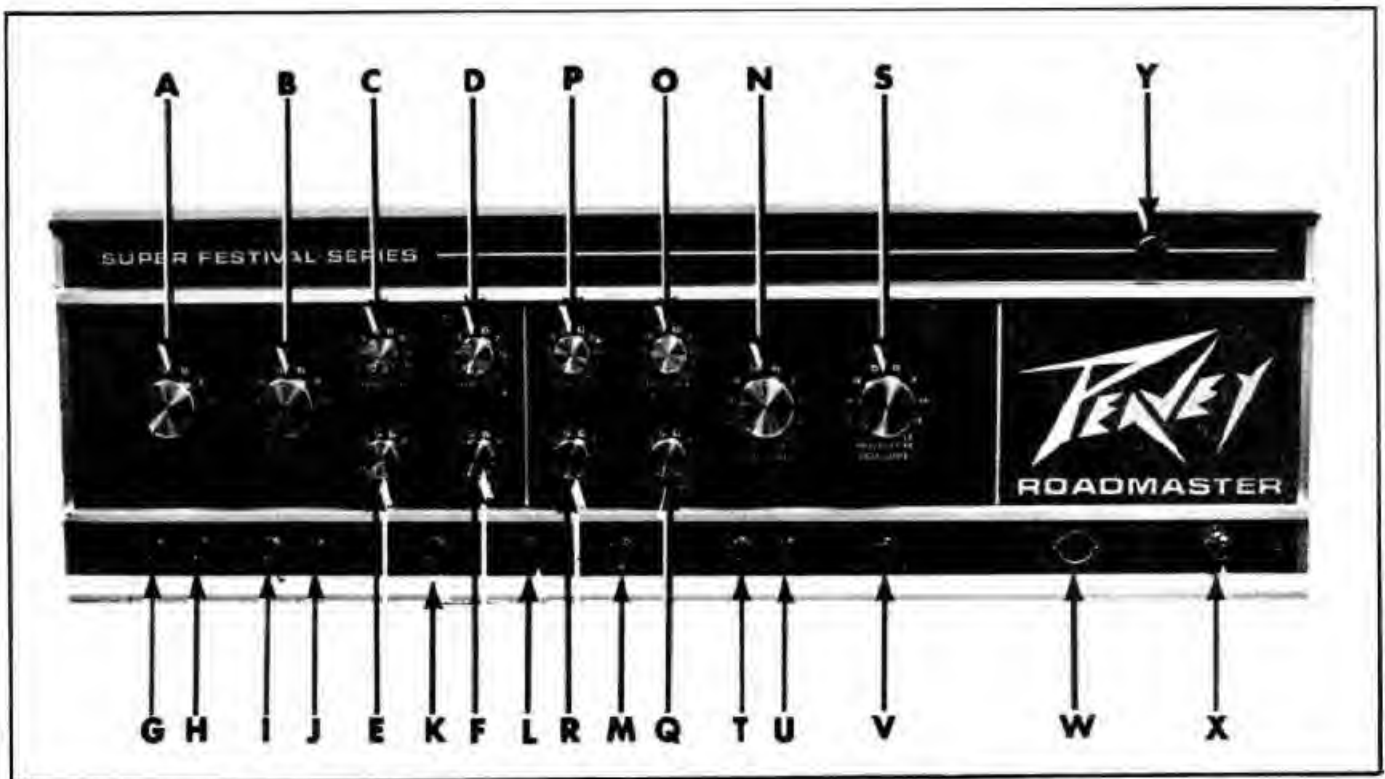
# ROADMASTER

## OWNER'S MANUAL

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Your new Roadmaster amplifier represents the "state of the art" in tube type equipment. Many recent advances in circuitry have been incorporated into this unit to provide you with long and trouble free operation. The flexibility of the tone control circuitry and patching facilities found on the Roadmaster are unmatched by any amplifier commercially available.

You have made an investment in purchasing this advanced audio system. To properly take advantage of this investment, you must thoroughly familiarize yourself with the many features of this amplifier. Below, we will explain the concept, applications, and the tonal variations available from your Roadmaster system. Essentially, the Roadmaster is a three channel amplifier. The "ENGLISH" channels are voiced to exactly reproduce the tonal curves and overload characteristics of the British amplifiers so popular with many of today's rock groups. Since virtually all the British amps are very similar, even down to the same combination of controls, we have duplicated these on the left side of the Roadmaster panel. The English Bright channel has the extremely bright and piercing tonality of the bright channels on British made amps, while the NORMAL English channel has the nearly flat and ballsy response so popular with many guitarists. The American CLEAR channel features the characteristic driving sound featuring slight mid-range cut with full lows and highs. The preamp of the American CLEAR channel has the tremendous gain and sustain so popular in the United States.



The Roadmaster is not unique in having three channels, but is unique, by featuring a complete patching panel which allows **any** combination of the three channels to be used for incredible sustain, overload dynamics, and harmonic control. By proper use of the patch panel in conjunction with our exclusive "AUTOMIXER" foot switch, almost any guitar sound can be obtained. The ability to series and parallel various combinations of preamplifiers and tone circuitry is built into this amplifier. To develop the full potential of the Roadmaster, you **must** learn the proper use of this professional grade amplification system.

## CAUTION!

LEARN THE SOUNDS AVAILABLE FROM THE VARIOUS INPUT JACKS BEFORE YOU ATTEMPT TO USE THE ROADMASTER IN CONCERT!!!!!!!!!!!!!!!!!!!!!!!!!!!!

### ENGLISH BRIGHT CHANNEL

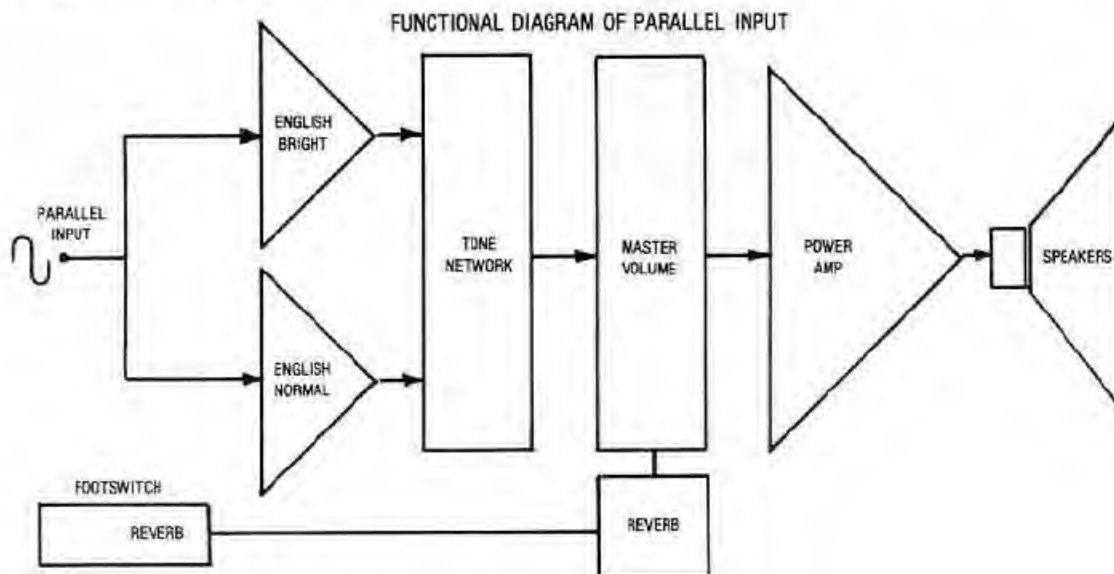
This channel's input jacks are located just below the "BRIGHT VOLUME" (A). The number one input (G) has exactly twice the gain as input number two (H) and should be used in all cases where the signal from your instrument does not overload the input stage of the Bright channel preamp. If the instrument signal seems to "break up" the amp when in number one, then the number two jack should be used. If two instruments are used then both inputs have the same gain. The level of the bright channel is controlled by the Bright volume. You may control the sustain and dynamics of this channel by using the bright volume in conjunction with the master volume control(s). The overall tonality is altered with the bass, treble, middle and presence controls shared with the ENGLISH NORMAL channel. Reverb is available on this channel by simply turning up the reverb level control (R) to achieve the desired reverb blend.

### ENGLISH NORMAL CHANNEL

The dual input jacks for this channel are placed just below the NORMAL VOLUME (B). The number one input (I) has twice the gain of number two (J) and should be used whenever possible. The operation of this channel is essentially identical to the BRIGHT channel except that it does not have the extreme high frequency boost built into the bright inputs. This channel should be tried first by those seeking to simulate the "British" sound used on many recordings today and in "Acid Rock" material of several years ago. The extremely flat response, coupled with tremendous gain and sustain make for smooth overload characteristics and punchy midrange necessary for that "fat and ballsy" sound sought by many guitarists. Additional sustain and effects can be obtained by using the Normal volume control in conjunction with the Master volume control(s). Generally, it is best to run the individual channel's volume almost fully clockwise with the Master volume set on the lower settings to allow the preamp to overload, allowing both sustain, as well as, harmonic generation from the overdriven input stages. Reverb is available on this channel by turning up the reverb level control to the desired blend.

### PARALLEL INPUT

By plugging your instrument into the parallel jack (K), the switching jack automatically places the signal from your instrument into **both** "ENGLISH" channels. Plugging into this parallel jack is the same as using a patch cord to bridge into both bright and normal channels, except that the internal circuitry **automatically** performs the patching function. When plugged into the parallel jack, **both** bright and normal volume controls are active and the desired blend of each can be found by varying the level of each, relative to the other. As with each individual channel, the common set of tone controls sets the overall tonal balance and should be adjusted according to personal taste. The Master volume control(s) may be used for even more control of dynamics and overload harmonics.



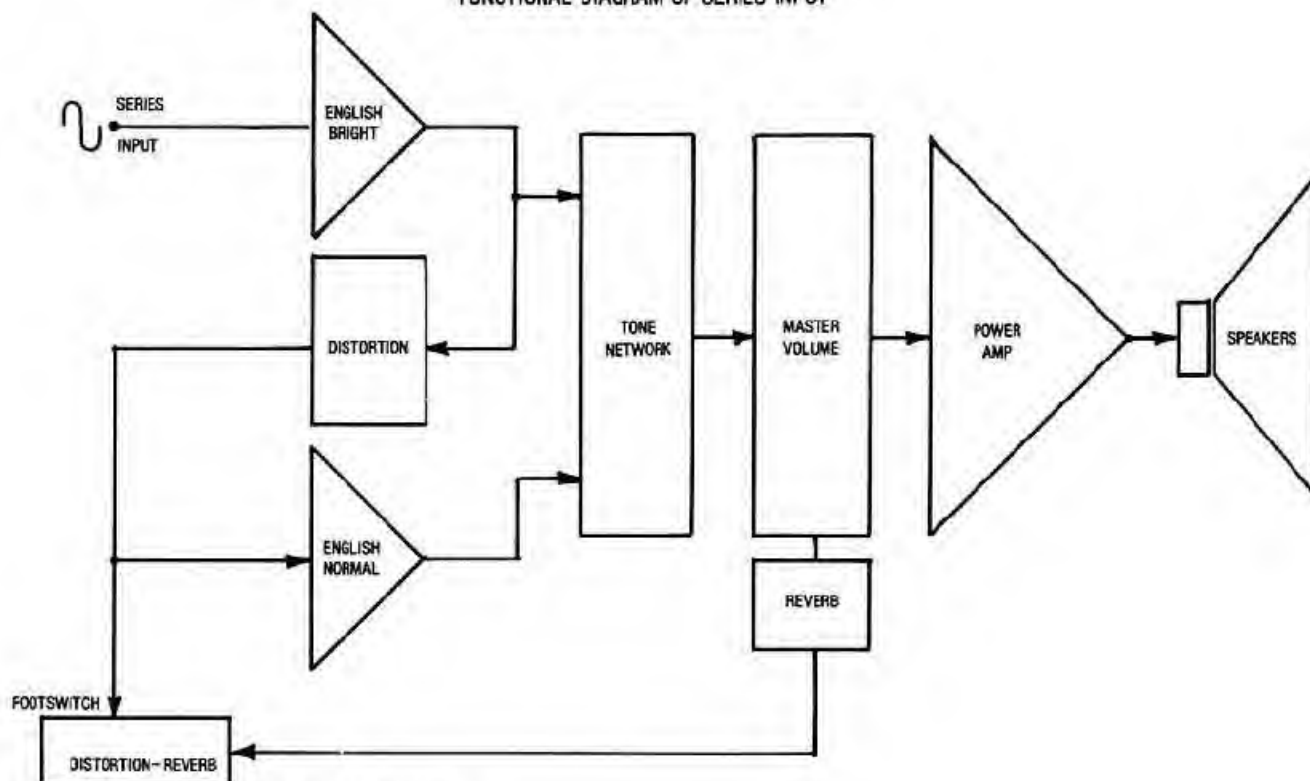
IN PARALLEL MODE, FOOTSWITCH IS OPERATIONAL ONLY FOR REVERB.

## SERIES INPUT

Just as the parallel jack activates internal switching to place the instrument inputs into both channels, the series jack (L) activates another set of switching contacts to place the bright channel output signal through a distortion stage into the input of the normal channel. By placing the preamps in series, incredible sustain and overload harmonics can be generated. Experimentation with various combinations of volume control settings will yield an infinite variety of harmonic characteristics and sustain durations. The bright volume will control the "clean" signal while the normal volume will control the desired amount of harmonics. (1) These functions can be used in conjunction with the master volume control (S) to avoid driving the power amplifier to full output while seeking the desired effects enabling the operator to obtain sustain and overload effects at very low volume levels, such as those required in some recording studio applications. Experimentation is the necessary requirement to take full advantage of this unique feature of your ROADMASTER.

To provide an added measure of flexibility for the professional, we have designed a footswitch that is capable of remotely controlling this series switching circuit. The distortion button on the AUTOMIXER/footswitch disables the series connection of the preamps and thereby enables the performer to cut the series connection out of the circuit with the push of a button. It must be remembered that this DISTORTION button is the **only** button, other than reverb, effective when the instrument is plugged into the SERIES input jack. Before a performance, the position of the switch must be determined and the proper blend set up by use of the various controls.

FUNCTIONAL DIAGRAM OF SERIES INPUT



IN SERIES MODE, FOOTSWITCH IS OPERATIONAL  
ONLY FOR DISTORTION AND REVERB

## ENGLISH CHANNEL TONE CONTROLS

These tone circuits are identical to those used in the most popular British made amps and use the same critical component values to exactly duplicate their action and intonation. The treble control (C) is a passive electronic circuit that varies the high pass characteristic of this tone control network. The bass control (D) is part of a passive low pass circuit and varies the amount of low frequencies passed through the network. The middle control (E) varies the middle "notch" of the "modified bridged T" tone control network. The presence control (F) works independently of the other tone controls and serves to add the capability to boost the extreme high frequencies without unduly changing the middle and low frequencies. The action of these controls is conventional and should present no problem in achieving proper tonal balance. **It has been found that excessive treble boost should not be used when the amp is being used in the series mode or when the various distortion features are in use.**

## AMERICAN CLEAR CHANNEL

This channel is similar to those used on other PEAVEY amplifiers and incorporates the most advanced negative feedback tone networks designed into any contemporary amplifier. The input stage of the clear channel features extremely low noise and is capable of handling an extremely wide dynamic range. The tone circuitry features true cut and boost controls that are able to alter the tonal blend in almost any manner. **It should be remembered that this type tone circuit is actually a form of electronic crossover and that the tone controls are actually volume controls for their particular frequency bands.** Some very interesting effects can be found by using the tone controls as "master volume controls" for their particular frequency bands. This may be accomplished by turning the clear volume up close to maximum while setting the tone controls in the "cut" or counter-clockwise positions. Variation and experimentation will illustrate the many different sounds available from this method of operation.

The two input jacks are in a similar arrangement as the other channels with input one (T) having twice the gain of input two (U). The treble control is part of an electronic crossover circuit and enables boost in the right hand (clockwise) positions and cut in the left hand (counter-clockwise) positions. When these controls are in the center or straight up (12 o'clock) positions, the bass and treble controls are flat. The action of the bass control is similar to that of the treble control except that it affects the bass range of frequencies. The middle control is of the "cut" only type and serves to give the characteristic middle notch so necessary for proper tonality. When the middle control is fully clockwise, no middle cut takes place and the middle is unchanged. Any rotation from the fully clockwise setting results in more middle cut. It has been found that our extremely effective middle control is able to give the "punchy" sound so popular in today's music. By cutting the mid-range slightly, we are effectively boosting the two frequency extremes at the top and bottom ends of the frequency spectrum.

## REVERB

The reverb control (R) is located in the clear channel area, but acts on all channels. The reverb system is capable of delivering better than 10 volts RMS to the reverb delay line and is fed from **all channels** that are operational. The reverb control is the level of the reverb **return** signal that is mixed into the power amplifier along with the main instrument signal. The reverb effect is remotely switchable by use of the footswitch. The footswitch controls the reverb for **all channels** and becomes effective as soon as the reverb level control on the front panel is turned up. The action of this reverb footswitch is conventional and should present no operational problems. **It should be remembered that the reverb signal is also controlled by the master volume and low settings of this control will require higher reverb settings to obtain proper blends.**

## AUTOMIX INPUT (BRIDGE)

Plugging your instrument into the **Automix Input Jack** (M) energizes the internal switching circuitry to bridge the inputs of **all three channels** together. This connection is equivalent to plugging into all three channels at the same time. In addition to bridging all three channels together at their inputs, the switching circuit also activates the selector, combiner, and distortion buttons on the footswitch to allow remote switching of the channels you want to play through, as well as, activating the distortion function.



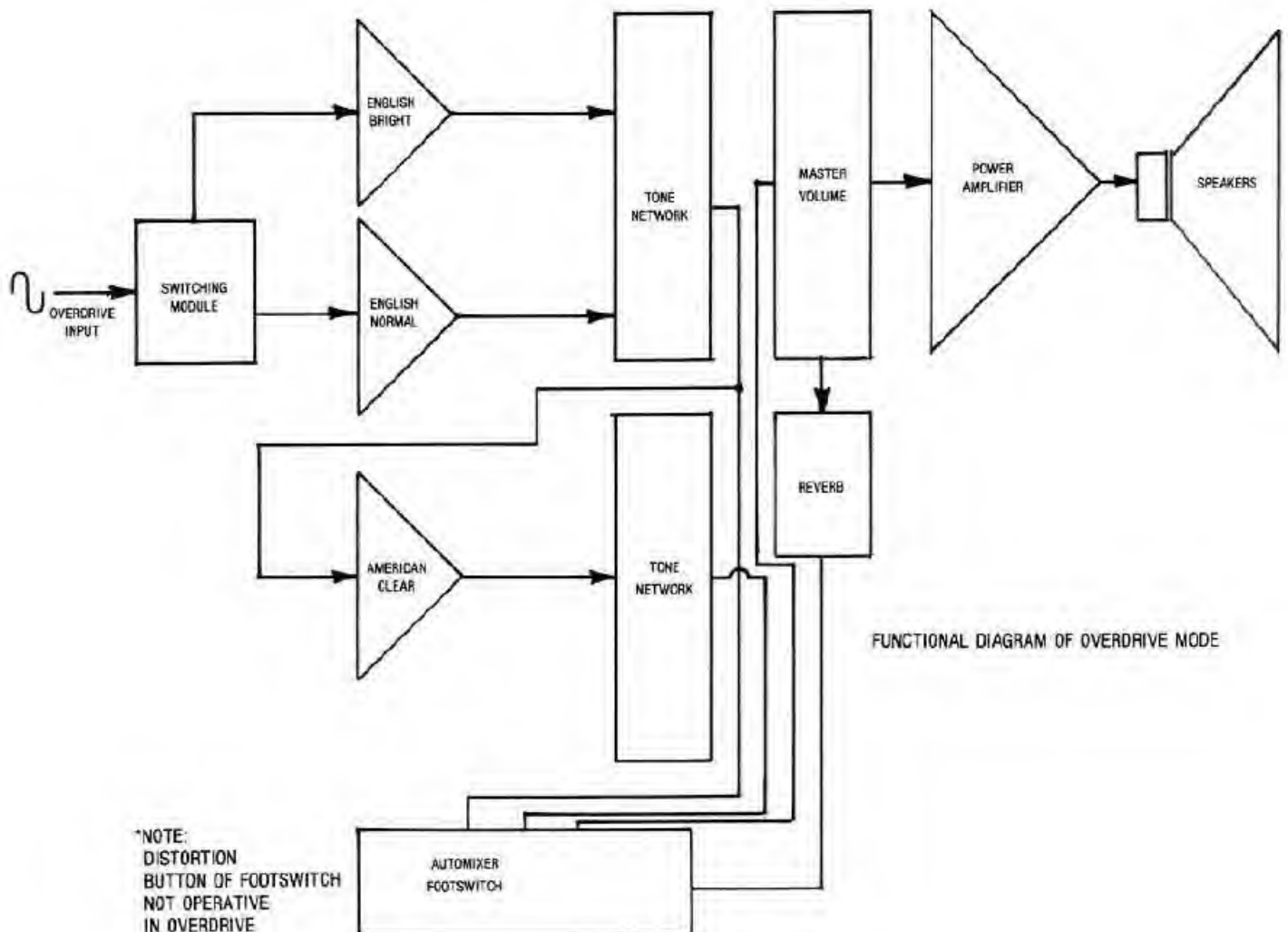
## REVERB BUTTON

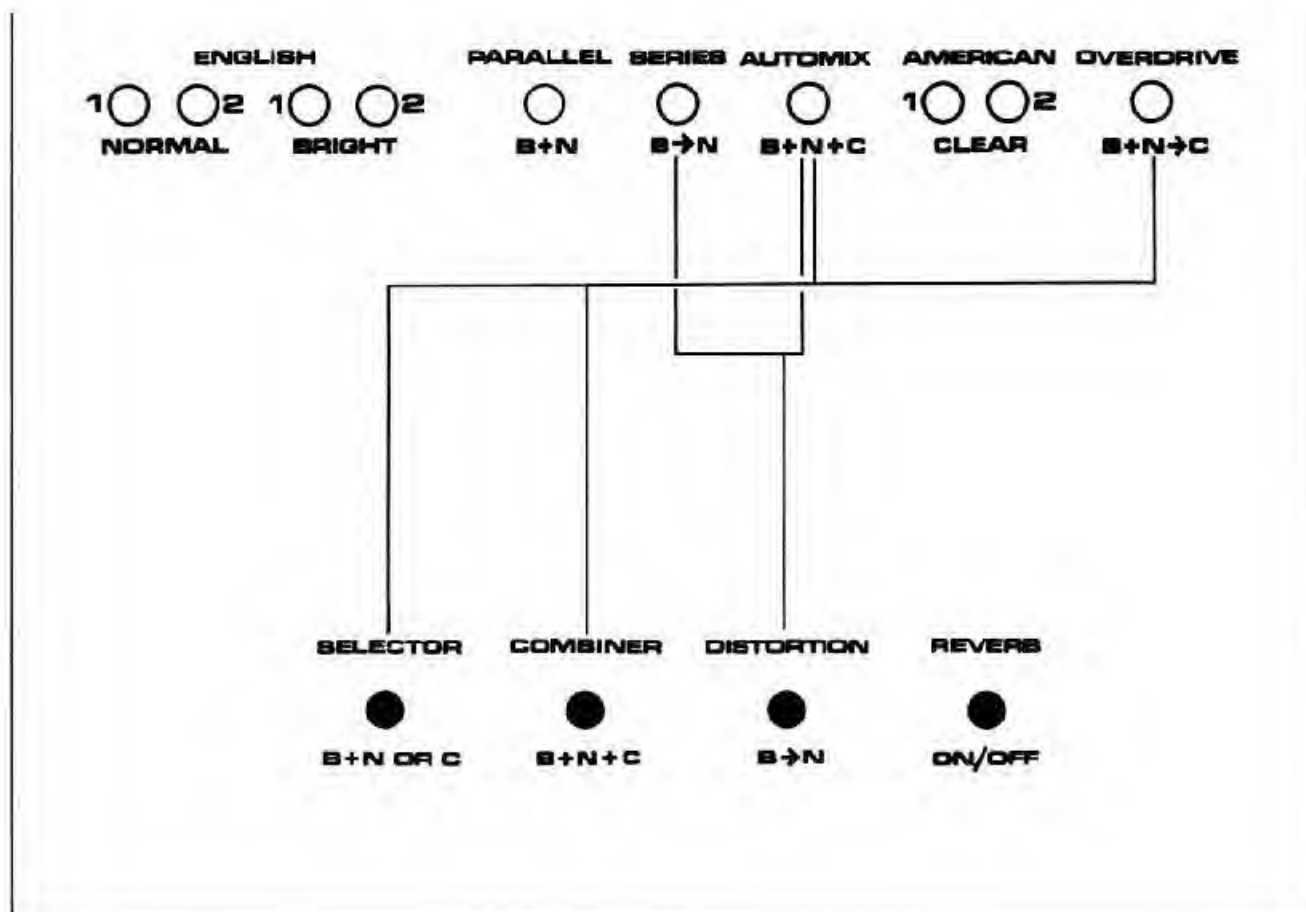
Remote control for reverb on all channels.

## OVERDRIVE INPUT

The ROADMASTER's overdrive input provides a method of driving BOTH English channels into the American clear channel. This connection is similar to the series of connection of the two English channels obtained when the instrument is plugged into the series jack, but allows both English channels to be driven into the INPUT of the American Clear channel. In this mode of operation, **all** tone controls on the front panel are operational and are capable of an infinite combination of tonality, sustain and harmonic control.

In the OVERDRIVE Mode of operation, the SELECTOR, COMBINER and REVERB footswitch buttons are operative. **The Distortion button is Inoperative.** The Selector button allows the signal from the English Bright and Normal to pass to the power amplifier **or** the overdriven American Clear Channel. When the COMBINER BUTTON is activated, the SELECTOR BUTTON is disabled and both English channels **and** the American channel pass to the power amplifier.






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## SUMMARY

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### ENGLISH BRIGHT & NORMAL CHANNELS

Duplicates the sounds available from British Amplifiers with same tone controls & circuitry.

### PARALLEL INPUT JACK

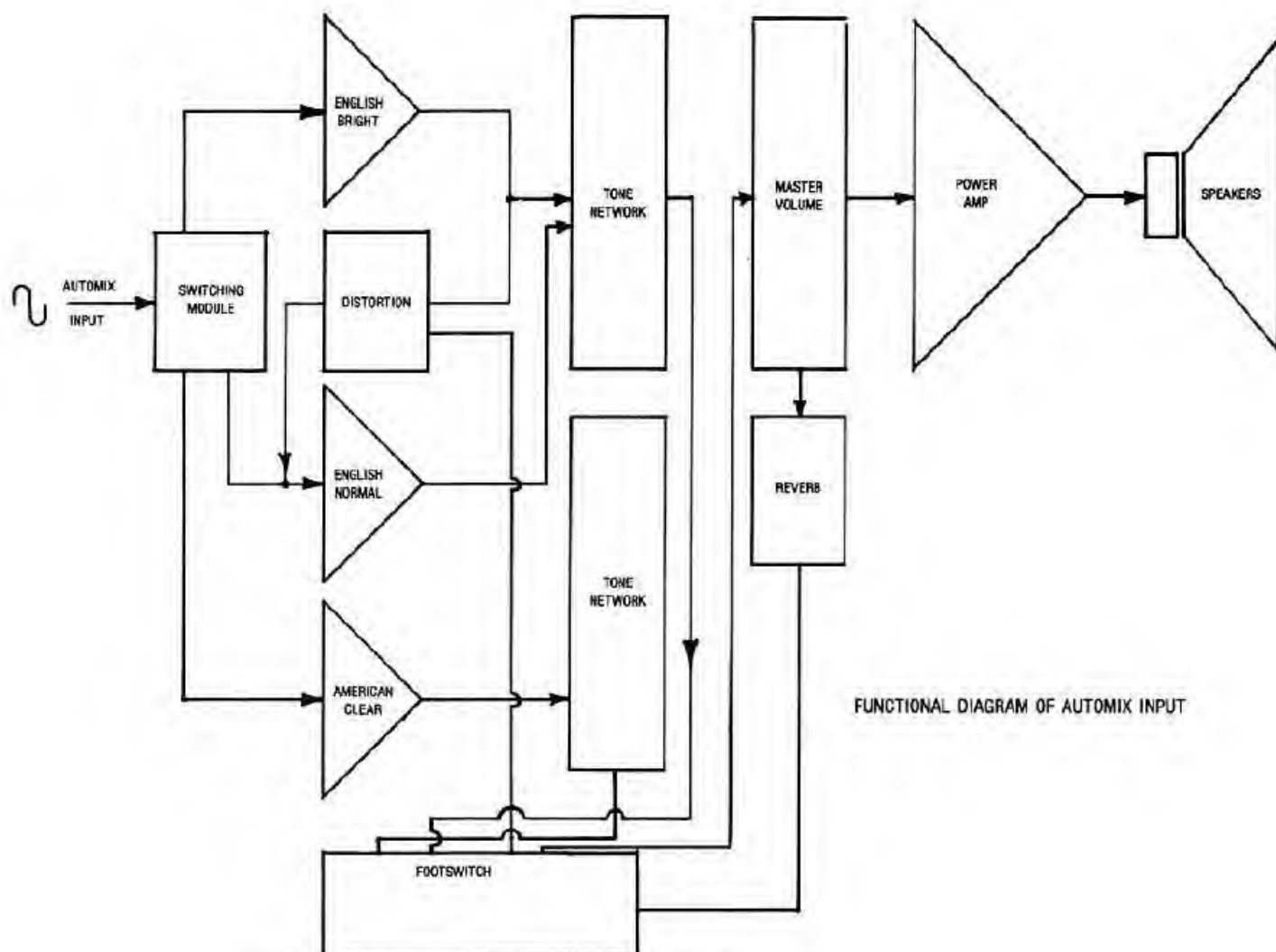
Enables **both** English channels to be utilized simultaneously. **Only the reverb button on the footswitch is operative when using this mode of operation.**

### SERIES INPUT JACK

Places the English Bright channel in front of the English Normal channel for sustain and overdrive capability. **The Distortion and reverb buttons on the footswitch are operational in this mode.**

### AMERICAN CLEAR CHANNEL

Features the high gain preamplifier and active tone control network as used on other PEAVEY amplifiers.



FUNCTIONAL DIAGRAM OF AUTOMIX INPUT

ALL FOOTSWITCH BUTTONS ARE ACTIVATED IN AUTOMIX MODE

## FOOTSWITCH SELECTOR BUTTON

The Selector button allows the performer to obtain the output from the English channels or the American channel. The selector may be thought of as an "either/or" type of control since it allows a choice of either English **or** the American channels. It should be remembered that the Selector is capable of switching between English **or** American channels, regardless of the settings of the DISTORTION button which affects the English channels **only**. As the name implies, the Selector button selects either channel desired. It should be noted, however, that the Selector button is functional only when the instrument is plugged into the automix or overdrive jacks. (As shown on the footswitch diagram)

## COMBINER BUTTON

The Combiner button defeats the Selector button and allows **all** channels to be in the circuit at one time. **The Selector button becomes inoperative as soon as the Combiner button is pushed.** We had to divide the function of these switches between two buttons since there are no three position footswitches available to allow use of English or American or **both**.

## DISTORTION BUTTON

The Distortion button on the footswitch will defeat the series connection distortion in the English channel.

## AUTOMIX (BRIDGE) INPUT JACK

This unit automatically Bridges the inputs of ALL THREE channels together. All tone controls are active in this mode. ALL BUTTONS ON THE FOOTSWITCH ARE ACTIVE USING THIS INPUT!

## OVERDRIVE INPUT JACK

This input jack causes the signal to pass through both ENGLISH channels then places this output into the INPUT of the AMERICAN CLEAR CHANNEL. This Series connection gives tremendous sustain and the capability to overdrive the clear channel with the English channels. ALL tone controls are active in this mode and can be used in tandem to produce unmatched tonal versatility.

ALL BUTTONS ON THE FOOTSWITCH, **EXCEPT** DISTORTION, ARE ACTIVE IN THIS MODE.

NOTE: PLEASE REMEMBER THAT THE **COMBINER** BUTTON **DISABLES** AND **OVERRIDES** THE SELECTOR BUTTON ON THE FOOTSWITCH.

## CAUTION

Do not plug more than one instrument into the series, Parallel, Automix or overdrive jacks at the same time!

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## SPECS:

**OUTPUT POWER:**  
200 watts RMS @ 5% THD  
into 2 ohms

**INPUT IMPEDANCE:**  
330 K ohms

**SENSITIVITY:**  
40 mV @ 1 KHZ  
(Tone controls flat, volume 12:00)

**SIGNAL-TO-NOISE RATIO:**  
74 DB  
(50 K ohm source impedance)

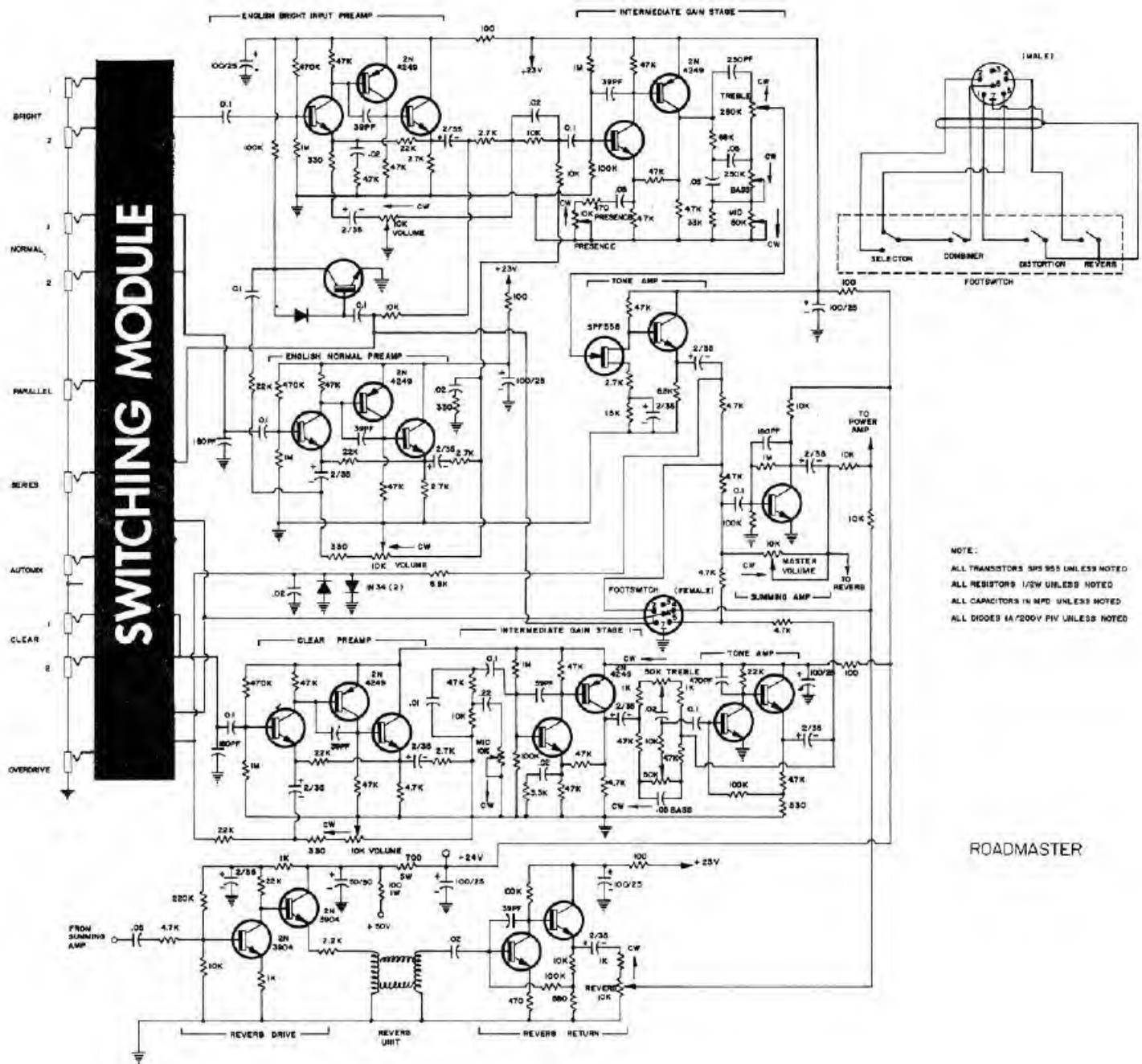
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**PEAVEY ELECTRONICS CORP.**



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ROADMASTER

## POWER AMP

